

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Steven M. Bloom, Michael S. Art Unit : 3693  
Spector and John L. Jacobs Examiner : Sara M. Chandler  
Serial No. : 10/001,900 Conf. No. : 8995  
Filed : November 14, 2001  
Title : BALANCING ARBITRAGABLE TRACKING SECURITIES

**Mail Stop Appeal Brief - Patents**

Commissioner for Patents  
P.O. Box 1450  
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REPLY BRIEF

Pursuant to 37 C.F.R. § 41.41, Applicant responds to the Examiner's Answer as follows

35 U.S.C. 101

The examiner had rejected Claims 1-26 under 35 U.S.C. 101 as directed to non-statutory subject matter. The examiner applied the so called “useful, concrete, and tangible result” test. Such a test was rejected by the Federal Circuit in *In re Bilski*. Appellant had argued the claims met that test as well as the “machine/transformation” test reaffirmed by the Federal Circuit in *Bilski*. The examiner withdrew the rejection.<sup>1</sup>

However, the examiner seeks to interject non-statutory subject matter reasoning in rejecting the claims over the prior art as well as 112, ¶2.

Claims 1, 7, 12, 18 and 23 are Complete and Not Conclusory.

The examiner takes issue with Appellant’s argument regarding the completeness of these claims. The examiner relies on *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993), arguing that: “**Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims.**”<sup>2</sup>

The examiner reliance is misplaced. *Van Geuns* dealt with a rejection under 35 U.S.C. 103, not 112, second paragraph, to which the examiner’s arguments pertain. In *Van Geuns* a

<sup>1</sup> Answer page 3.

<sup>2</sup> Id.

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party involved in an interference attempted to read into the claim the feature of a uniform magnetic field in order to avoid the prior art. Appellant has consistently argued that one skilled in the art would understand the metes and bounds of these claims, without reading any limitations from the specification into the claims. The specification is available to clarify, if needed, terms used in the claims, but has not been relied on to read in claim limitations, whether for 35 U.S.C. 103 or 112, second paragraph, purposes. *Van Geuns* does not address claim completeness under 112, second paragraph. Therefore, *Van Geuns* is not applicable.

Nor does claim 1 merely recite "... just recording ... nonfunctional descriptive material.", as argued by the examiner. The steps of "recording by the computer, delivery ... of a creation unit basket of securities ... and recording by the computer, delivery of a prescribed number of shares in the first fund ... and a second number of shares in the second fund to account for cash that is owed by the agent to the participant," are the necessary combination of features that distinguish over the art and are executed in the method for producing this particular financial product.

Similarly, Claim 7 requires instructions to "determine a second number of shares in the second financial product to account for cash that is owed ..." Claim 7 recites a calculation performed by the computer program instructions.

The examiner further argues for a requirement of a transaction. Appellant's claims recite a transaction in the conjunction of the features of claim 1 (or claim 7 for instance). Performing those steps or executing those instructions result in a transaction. While in some instances it could be that a transaction will not have a requirement for a cash amount that is owed, the steps still record that fact and the instructions still determine that no cash is owed.

#### Claims 2, 8, 13, 19 and 26

Claims 2, 8, 13, 19 and 26 do not require for novelty or antecedent basis "... the step of calculating the net asset value of the first fund at the close of trading in the second country in which the second fund is trading having previously occurred in the process."<sup>3</sup> Claim 2, recites the novel step of "calculating by the

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<sup>3</sup> Answer, page 20.

computer system an amount of cash needed to be exchanged between agent and the participant ... ” As part of this calculation one of the inputs that is needed is “the net asset value of the first fund, calculated at the close of trading in the second country.” The net asset value thus is an input into the calculation of the amount of cash. The calculation can be performed by various actors, which need not be specifically connected with any actions performed by claims 1 or 2.

Thus, to require Appellant to recite the actual a calculation of net asset value, rather than use that as an input would improperly permit infringers to avoid literal, direct infringement of the claims because the actor that performs the calculation need not be the actor that determines the net asset value.

The examiner argues: “**In response to applicant's arguments, the recitation has not been given patentable weight because the recitation occurs in the preamble; and as noted *supra* the body of the claim never performs the act of "producing shares of a first fund, which are traded on a first marketplace”**<sup>4</sup> While, Appellant has not relied on the preamble for patentable weight, the examiner’s reasoning is still faulty because as discussed *supra* the feature is accomplished by the recited steps.

Substantially is a definite term

Appellant has amply supported the term “substantially.” The term is definite and the specification provides a standard for measuring “substantially” based on the degree of arbitrage that the person of skill desired. The examiner also argues that: “**As suggested by the applicant the degree of ‘substantially’ could be arbitrarily changed depending upon the desires of a given user.”**<sup>5</sup> Appellant does not see how this detracts from the precision of the claim. Instead, this is a question of breath, necessary to prevent a trivial modification to again avoid infringement. The question is not whether a given user could arbitrarily change the composition of the second fund, but whether that given user would understand the metes and bounds of the subject matter of the claim.

One skilled in the art could depart from identical creation unit bases. That person would appreciate the concomitant effect on the exactness of arbitrage between the two funds. It is also

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<sup>4</sup> Answer, page 20.

<sup>5</sup> *Id.*, page 21

clear to one skill in the art would understand what the metes and bounds of that departure could be. Indeed, the market itself could dictate the extend of the departure, for if the departure was so great, the arbitrage would be ineffective. Therefore, the market itself would place restrictions on the degree of departure, in addition to the guidance offered by Appellant.

Other securities” and “value” are definite terms

The examiner argues that certain phrases such as “cash” “cash amount” and “value” are not understood by one skilled in the art. Appellant contends that these phrases given their ordinary meanings would be understood by one skill in the financial arts, and with the guidance provided by Appellant’s specification there use and function in the claims would be readily apparent. The examiner has not point to specific instances of where these terms were not understood.

The examiner argues that: “**What is meant by “value” is unclear and indefinite in the claimed invention. At a minimum, the use of the term "value" at times and "net asset value" other times creates clarity issues due to the use of inconsistent terminology as well as problems with respect to antecedent basis.**”<sup>6</sup> The instances of value and net asset value are clear. For example, as used in claim 2, the calculation of the NAV of the second fund is used to equate to the value of the creation unit basket for first fund plus or minus the cash amount. There is nothing inconsistent in that usage.

Appellant’s comments in the appeal brief does not suggest that “Value” would encompass “anything” as argued by the examiner. Rather, value as used in the claim is limited to what the value is of, such as in claim 2, the value of the creation unit basket for the first fund. Regarding, the examiner’s reasoning concerning essential material, the examiner misunderstands essential material and has mischaracterized Appellant’s argument. Essential material is the subject matter needed to distinguish over the cited art.<sup>7</sup> Appellant’s claims accomplish that, as will be discussed *infra*. In any event, the specification is available to the examiner not to read in

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<sup>6</sup> Answer, page 22.

<sup>7</sup> See *In re Geofeef*, 526 F.2d 1393, 1397, 188 U.S.P.Q. 131, (CCPA, 1975). It is not the role of the claims to enable one skilled in the art to reproduce the invention, but rather to define the legal metes and bounds of the invention.

claim limitations but to assist in construing the meaning of terms and elements recited in the claim.

The examiner argues that: "The independent claims from which claims 2, 8 and 13 depend make no prior reference to the net asset value, creating an antecedent basis problem." Appellant disagrees. While it is customary to introduce new items using the indefinite article "a" there exists exceptions to this normal usage. One such exception is where "Inherent components of elements recited have antecedent basis in the recitation of the components themselves."<sup>8</sup> A fund of any sort has but one net asset value at the close of trading on any particular day. To use the phrase "a" net asset value in the context of claim 2, would add confusion rather than clarity to the claim. The phrase a net asset value gives the incorrect impression that at the time of the calculation in claim 2, that there exists more than one net asset value that can be applied to that calculation.

35 U.S.C. 103

All claim limitations must be accorded patentable weight.

The examiner uses statutory subject matter reasoning to argue that the limitations of the claims are not entitled to patentable weight. It is well settled that all limitations in a claim must be accorded patentable weight. See for instance *In re Lowry*<sup>9</sup> where the Federal Circuit rejected use of such reasoning in deciding whether claims distinguished over the prior art.

Contrary to the examiner's view the steps performed by the computer require use of particular data. That data is manifest in the recording steps performed by the computer. These recoding steps are substantive steps and not mere post solution activity. Rather, the steps are fundamental to the claimed, non-obvious method. The data includes the existence of the exchange of a creation unit basket of securities for a prescribed number of shares in the first fund

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<sup>8</sup> MPEP 2173.05(e)

<sup>9</sup> *In re Lowry*, 32 F.3d 1579, 32 U.S.P.Q.2d 1031 (Fed. Cir. 1994).

and recording by the computer of delivery by either the agent or the market participant [of] a number of shares in the second fund or in other securities to account for a cash amount owed.

The data recorded by the computer is the result of a calculation of an amount of cash and a translation of that into a number of shares in other securities. However, all of these calculations need not be performed by the machine that produces the shares. So again, the examiner seeks to improperly limit the claims without the use of prior art. Contrary to the examiner's contention that "The data recorded by the computer is nothing more than nonfunctional descriptive material.", the data is in fact functional, because it is tied to the substrate of the claimed method, namely producing the shares in the financial product.

The examiner argues that: "**T**he actual "exchange . . . ." and "delivery . . . ." relies entirely on decisions and actions by people (i.e., the market participant and agent) and the claim is recited in a way that does not make the actions of these people required (e.g., intended use/result language, passive language)."<sup>10</sup> Appellant's claims do not claim the decisions and actions of people, but rather computer implemented steps resulting from those actions.

Moreover, again using statutory subject matter reasoning rather than reasoning based on the prior art, the examiner seeks to have the claims cover electromagnetic carrier signals.<sup>11</sup> The claims, as written, do not read on "an electromagnetic carrier signal." Moreover, the specification neither describes nor enables "recording by the computer on an electromagnetic carrier signal." The claims however, are enabling for what is actually claimed, recording by the computer in, e.g., memory or disk of the described computer.

#### Claims 1, 4 and 5<sup>12</sup>

Claim 1 requires "recording by the computer, delivery . . . of a creation unit basket of securities having a creation unit basis that is substantially the same as a creation unit basis for a

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<sup>10</sup> Answer, page 24.

<sup>11</sup> *Id.*

<sup>12</sup> Appellant's original grouping was Claims 1, 4, 5, 7, 10, 12, 15 and 17. However, Appellant argues claims 7, 10 and 17 and Claims 12 and 15 separately herein, because of the examiner's separate treatment of the preambles and improper introduction of statutory subject matter reasoning.

second fund that is traded on a second marketplace in a second, different country than that of the first fund.”

Although Gastineau describes S&P 500 Depository Receipts (SPDRs) and indeed “creation units,” what is utterly missing from Gastineau, and Gastineau in combination with Strauss, is that the first fund has a creation unit basis that is substantially the same as a creation unit basis for a second fund that is traded on a second marketplace in a second, different country than that of the first fund.” The examiner fails to address this critical feature of claim 1. That is, Gastineau describes S&P 500 Depository Receipts traded in New York based on an index that is listed in New York. That is, Gastineau merely describes the second fund in claim 1, but neither describes nor suggests whether alone or in combination with Strauss the first fund. That is, Gastineau does not describe two different funds that have the same creation unit based, but which are traded in different countries.

The examiner acknowledges that Gastineau fails to suggest: “recording by the computer, delivery of a prescribed number of shares in the first fund … and a second number of shares in the second fund to account for cash that is owed by the agent to the participant.”<sup>13</sup> The examiner relies on Strauss for this feature. The examiner argues that: “Strauss introduces the idea of an in-kind exchange.”<sup>14</sup> The examiner has not cited any portion of Strauss that suggests “an in-kind exchange” nor has the examiner explained how an in-kind exchange relates to the claimed subject matter. The examiner merely discusses Strauss’s teaching of “creation units,” which is merely duplicative of Gastineau.

The examiner has shifted reasoning<sup>15</sup> now arguing that: “**delivery of a prescribed number of shares in the first fund to the market participant, in exchange for the creation unit basket of securities and a second number of shares in the second fund to account for cash that is owed by the agent to the participant**” have been interpreted as nonfunctional descriptive material and not further limiting of the invention claimed.”<sup>16</sup> It is evident that examiner agrees with Appellant’s contention that Strauss does not suggest the claimed

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<sup>13</sup> Answer, page 26.

<sup>14</sup> *Id.*, page 27

<sup>15</sup> Compare reasoning on pages 25 and 27 to reasoning on page 11 of the Examiner’s Answer.

<sup>16</sup> Answer, page 26.

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limitation. Instead, the examiner ignores the claimed limitations, by improperly classifying the limitation as nonfunctional descriptive material that the examiner need not give patentable weight to.

Clearly, the steps are functionally related to the substrate of the claim, namely the computer implemented method. The feature “recording by the computer, delivery of a prescribed number of shares in the first fund . . . and a second number of shares in the second fund to account for cash that is owed by the agent to the participant...” is directed to subject matter for which the examiner must give full patentable weight. See *In re Lowry*. Therefore, the examiner must consider all claim limitations.

It is a fair inference that the examiner concedes that the features are not taught in the combination of references at least because the examiner fails to respond to Appellant’s substantive arguments made in the Appeal Brief. Instead the examiner relies on a dubious principle of ignoring claim limitations.

### Claims 7, 10 and 17

The examiner argues: “First, applicant's preamble has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150,152, 88 USPQ 478, 481 (CCPA 1951).”<sup>17</sup>

Appellant contends that with respect to claim 7, the preamble must be considered as part of the substrate of the invention to which the instructions are tied. Claim 7 is a so called Beauregard claim. The Office agreed *In re Beauregard*, that computer programs embodied in a tangible medium were patentable subject matter<sup>18</sup> and promulgated rules consistent therewith.<sup>19</sup> Accordingly, the preamble is proper and defines the substrate of the invention, namely “a computer readable medium.” It embodies the computer program product that

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<sup>17</sup> Answer, page 26.

<sup>18</sup> *In re Beauregard*, 53 F.3d 1583, 35 U.S.P.Q.2d 1383 (Fed. Cir. 1995).

<sup>19</sup> OG Notices: 22 November 2005 Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility

comprising instructions for causing a processor to perform the recited task, which task that is neither described nor suggested by the combination of Gastineau/Strauss, as the examiner appears to concede. Instead, the examiner improperly chooses to ignore the claim limitation, which for the reasons given above, is improper.

Claims 12 and 15

Claim 12 directed to a system including a computer and storage medium storing a computer program product is not directed to nonfunctional descriptive material for reasons discussed above.

Claims 18, 21, 23 and 25

Claim 18 is directed to computer program product residing on a computer readable medium are is allowable using reasoning discussed above.

Claim 23 is directed to a method for administrating a first exchange-traded fund, the method executed on a computer system, and includes steps performed by a computer, including “recording by the computer system . . . determining by the computer system a number of shares . . . .” Claim 23 does not include two recording steps as argued by the examiner.<sup>20</sup> For these reasons and the reasons discussed above, claim 23 is neither described nor suggested by the references.

Claims 2, 8 and 13

These dependent claims, similar to the independent claims from which they depend, neither recite “intended use/intended result language, passive language etc.”, nor are obvious in view of Gastineau/Strauss, for reasons of record.

Claim 2 limits claim 1 requiring the features of: “calculating by the computer system an amount of cash needed to be exchanged between agent and the participant to have the first fund equate to the second fund at the net asset value of the second fund at the close of trading of the

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<sup>20</sup> Answer pages 28-29.

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second fund in the second country, wherein if the cash needed to be exchanged is owed by the agent to the participant that cash is settled in the second number of shares in the second fund."

The examiner also argues that: "**The claimed invention never performs the steps or acts recited in the language interpreted as an intended use/result, passive language etc. As noted supra, for example, since the computer of the claimed invention never performs the act of calculating the net asset value of the second fund at the close of trading in the second country, there is no guarantee that it will occur or is required to occur.**"<sup>21</sup>

Appellant disagrees, as discussed above, claim 2 performs the step needed to establish additional non-obviousness over the art, the net asset value is used as an input into that calculation..

The examiner's observation that: "**Strauss describes how cash may be used to ensure that shares are purchased at NAV. (Strauss, pgs. 2-3),**"<sup>22</sup> does not address the claim feature which due to its dependence from claim 1, requires that the cash that is calculated is an input into the step of recording by the computer (claim 1) of the number of shares in the second fund or in other securities to account for the calculated cash amount owed.

#### Claims 6, 11 and 16

These claims when properly construed, according patentable weight to the recited features, as argued *infra* are neither described nor suggested by Gastineau in view of Strauss for reasons stated in the Appeal Brief.

#### Claims 19, 22, 24 and 25

These claims when properly construed, according patentable weight to the recited features, as argued *infra* are neither described nor suggested by Gastineau in view of Strauss for reasons stated in the Appeal Brief.

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<sup>21</sup> *Id.* page 32.

<sup>22</sup> *Id.* page 33.

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KSR

The remainder of the examiner's answer that appears under this heading appears to be a re-hash of the examiner's response to arguments in the action appealed from, which was addressed by Appellant in the Appeal Brief.

For these reasons, and the reasons stated in the Appeal Brief, Applicant submits that the final rejection should be reversed.

This Reply Brief is accompanied by a Request for Oral Hearing.

Respectfully submitted,

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